

Berkeley County Base Labor Market Analysis



South Carolina
Department of
Commerce
Labor Market Information



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EXECUTIVE SUMMARY

Population

Berkeley County's population growth has been faster than the state's in recent years.

Future growth is expected to continue to be faster than the state's.

Almost half of Berkeley County's workers live within the county, and over 20% come from Charleston County.

Income

Per capita income growth has been faster than in the state and nation.

Berkeley County's per capita income has remained below state and national levels from 1997 to 2007, but moved closer to the state level.

Berkeley County's average wages are higher than the state's for the computer and mathematical; architecture and engineering; life, physical and social science; community and social services; education, training and library; protective service; office and administrative support; installation, maintenance and repair; production; and transportation and material moving occupation groups.

Education

The number of degrees awarded by area post-secondary institutions has increased.

The greatest increase has been in the area of healthcare.

Occupations

Almost all major occupational groups are expected to have faster growth in Berkeley County than in the state.

Requirements for Berkeley County's workers are expected to grow in the following levels of education and experience:

Work experience in a related field, postsecondary vocational award, associate's degree, bachelor's degree, degree plus work experience, and master's degree or higher.

Industry

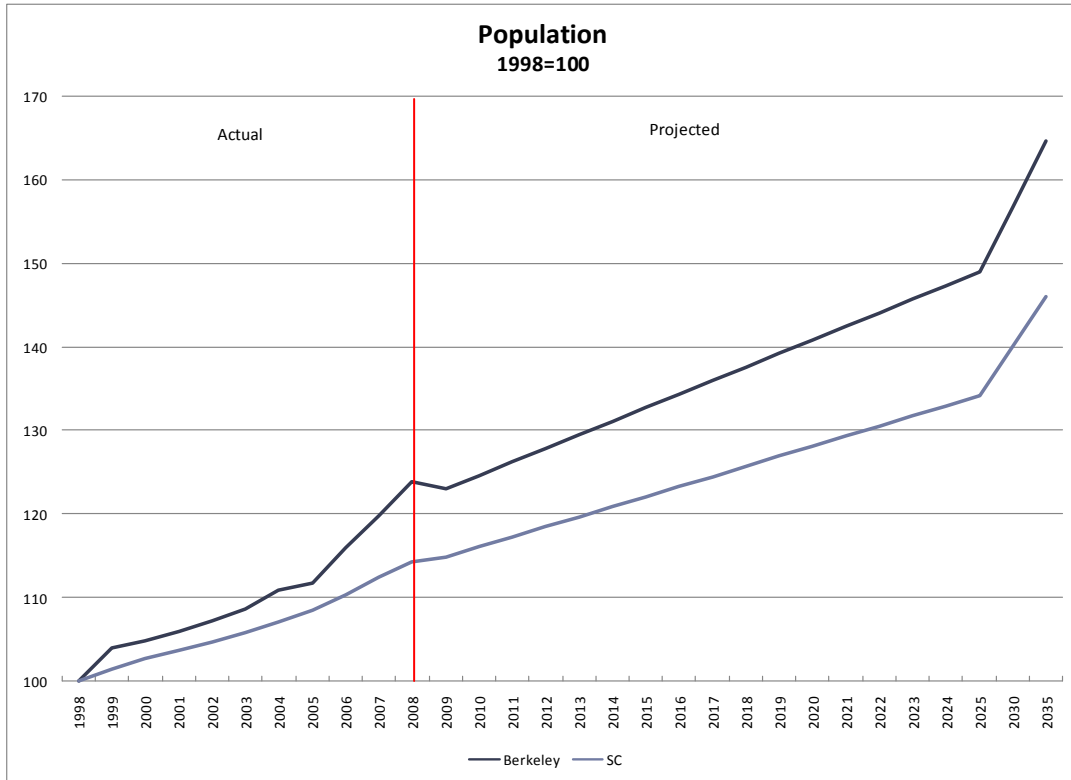
These sectors are rated as having potential in Berkeley County:

Machinery manufacturing; miscellaneous manufacturing; durable good wholesalers; and professional, scientific and technical services.

POPULATION

Growth

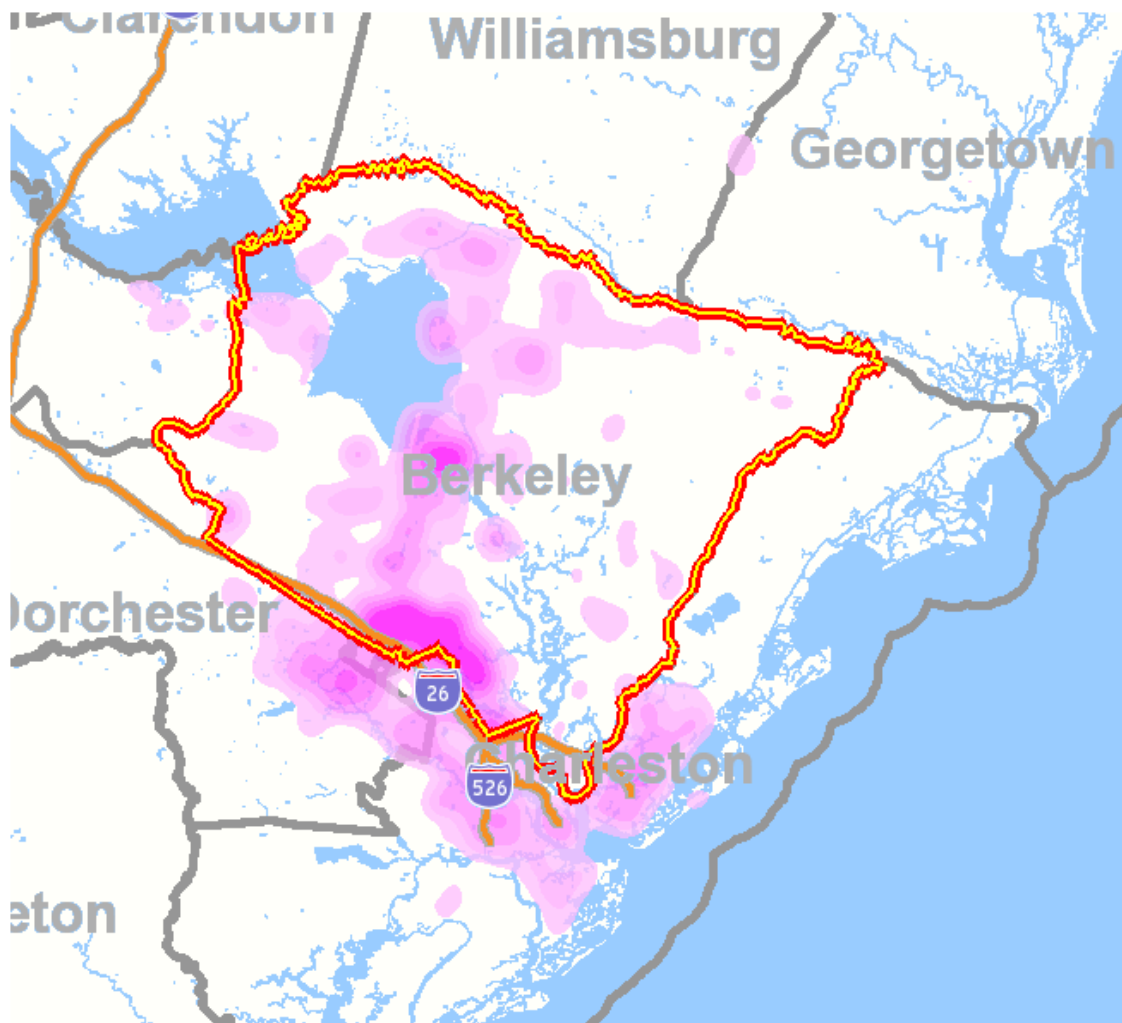
Berkeley County's 2008 population was 169,327. The county population has grown by 23.9 % since 1998, compared to 14.3% growth for South Carolina. Berkeley's future population growth is expected to continue to be faster than the state's.



Source: U.S. Census Bureau (estimates) and SC Budget & Control Board/Office of Research and Statistics (projections).

LABORSHED

The map below shows where Berkeley County workers come from (in 2006, latest available data). Berkeley County draws almost half of its workers from within its borders, and over 20% come from Charleston County.



Source: U.S. Census Bureau, Local Employment Dynamics.

Characteristics of Workers

Age of Workers:

30 or younger	26.3%
31 to 54	58.9%
55 or older	14.8%

Earnings of Workers:

\$1,200 per month or less	25.3%
\$1,201 to \$3,400 per month	41.6%
More than \$3,400 per month	33.1%

States Where Workers Live:

South Carolina	99.0%
All other locations	1.0%

Counties Where Workers Live:

Berkeley	48.0%
Charleston	21.8%
Dorchester	11.0%
Orangeburg	2.1%
Richland	1.9%
Georgetown	1.8%
Horry	1.7%
Williamsburg	1.5%
Lexington	1.4%
Colleton	1.0%
All Other Locations	7.8%

Cities Where Workers Live:

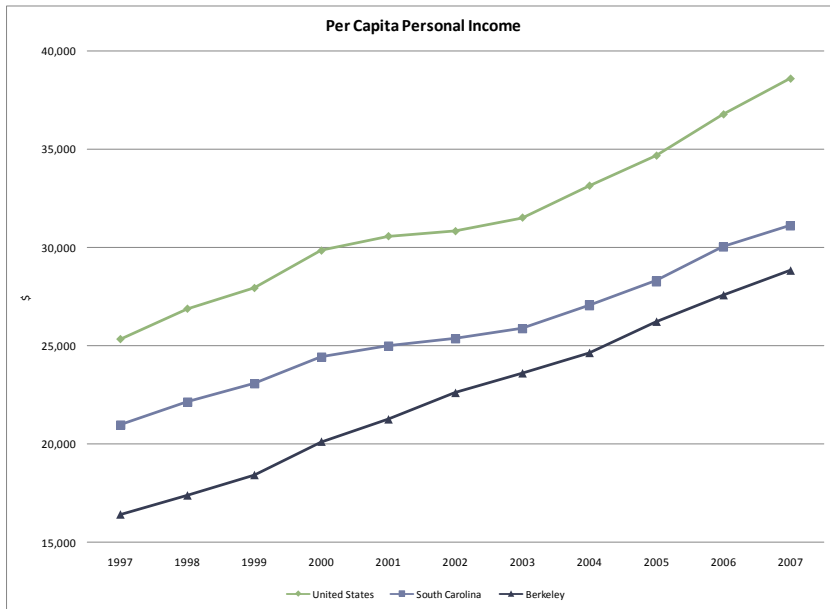
Goose Creek, SC	7.9%
Charleston, SC	6.1%
North Charleston, SC	6.0%
Mount Pleasant, SC	5.0%
Summerville, SC	4.0%
Moncks Corner, SC	3.5%
Ladson, SC	3.2%
Hanahan, SC	2.3%
Columbia, SC	0.7%
St. Stephen, SC	0.6%
All Other Locations	60.8%

Source: U.S. Census Bureau, Local Employment Dynamics.

INCOME

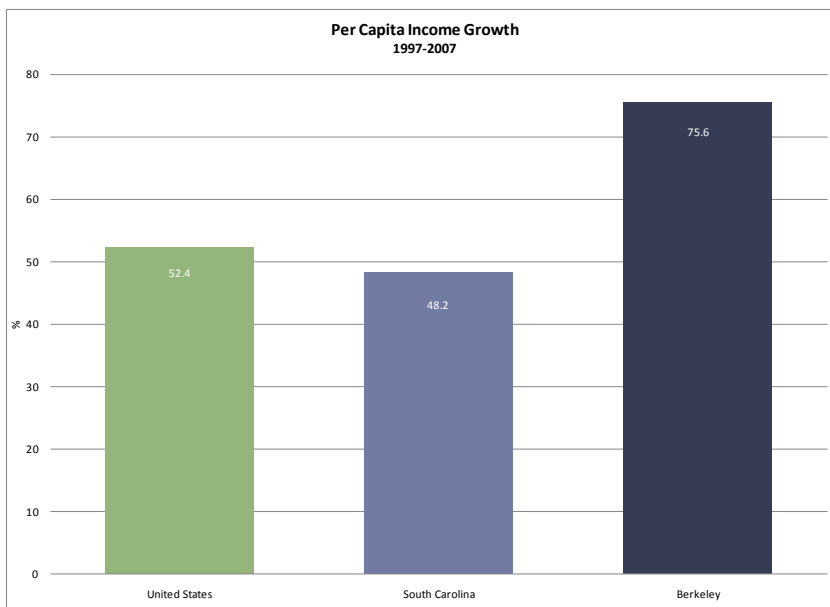
Per Capita Income

Berkeley County's per capita income has remained below state and national levels, but has gained on the state.



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Berkeley County's per capita income has grown faster than South Carolina's and the nation's, despite rapid population growth. Income growth was substantially above average.



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Wages by Industry

Berkeley County's average wages are above those of South Carolina (\$795 vs. \$697 in 2008). Average wages were up 25% in Berkeley County over the past five years, compared to 18% for the state. All major sectors, except administration and support and waste management, and federal government, had growth.

Industry	NAICS Code	2008 Average Weekly Wage (\$)	2003 Average Weekly Wage (\$)	% Change
Total, Private and Government		795	635	25
Construction	23	787	632	25
Manufacturing	31-33	1,205	1,023	18
Retail Trade	44-45	454	376	21
Transportation and Warehousing	48-49	641	596	8
Information	51	935	822	14
Finance and Insurance	52	713	566	26
Real Estate and Rental and Leasing	53	698	440	59
Administration & Support & Waste Management & Remediation Services	56	511	587	-13
Health Care & Social Assistance	62	497	379	31
Arts, Entertainment, and Recreation	71	404	318	27
Accommodation and Food Services	72	229	194	18
Other Services (Except Public Administration)	81	619	376	65
Federal Government		639	978	-35
State Government		1,105	940	18
Local Government		639	548	17

Source: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Wages by Occupation

Average wages in Berkeley County are higher than the state average in the following occupational groups:

- Computer and mathematical
- Architecture and engineering
- Life, physical and social science
- Community and social services
- Education, training and library
- Protective service
- Office and administrative support
- Installation, maintenance and repair
- Production
- Transportation and material moving

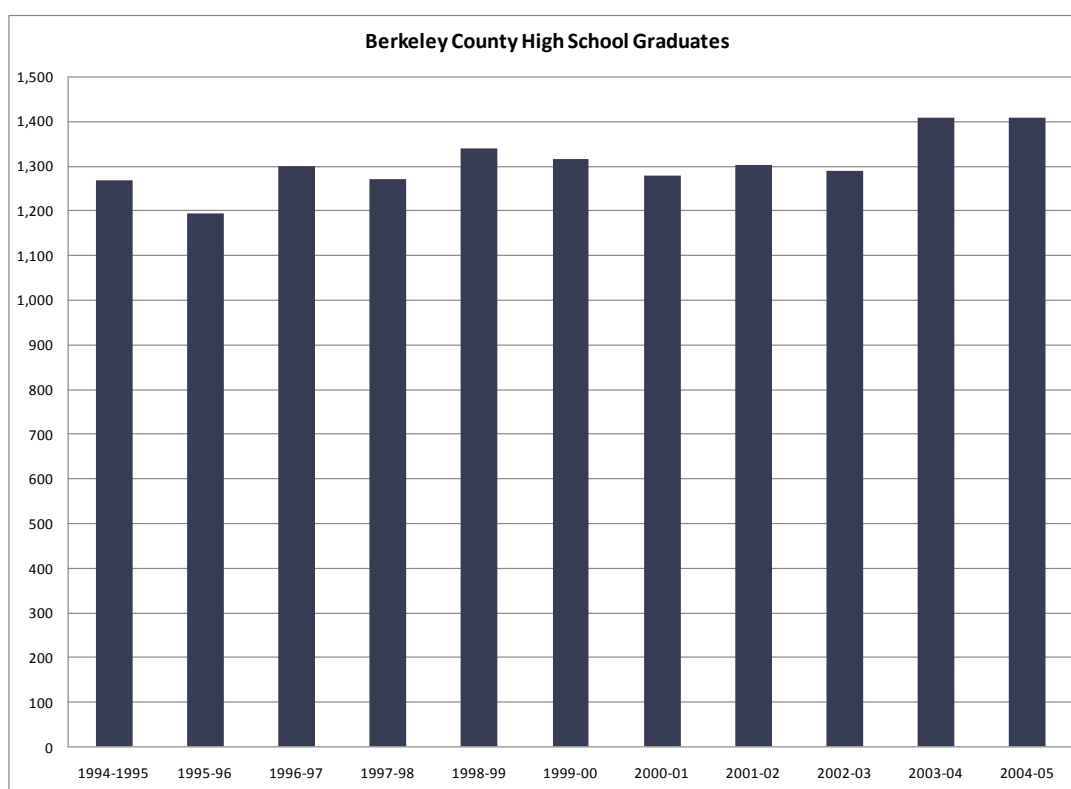
Occupation	2009 Berkeley County Median Hourly Wage (\$)	2009 SC Median Hourly Wage (\$)
Management occupations	22.65	23.49
Business and financial operations occupations	18.08	19.14
Computer and mathematical science occupations	30.68	25.83
Architecture and engineering occupations	29.92	28.98
Life, physical and social science occupations	23.03	21.12
Community and social services occupations	13.32	12.94
Legal occupations	18.35	25.39
Education, training and library occupations	22.89	22.66
Arts, design, entertainment, sports and media occupations	11.52	12.27
Healthcare practitioners and technical occupations	25.19	28.56
Healthcare support occupations	9.04	10.74
Protective service occupations	14.65	14.37
Food preparation and serving related occupations	7.57	8.18
Building and grounds cleaning and maintenance occupations	8.49	8.75
Personal care and service occupations	8.21	8.41
Sales and related occupations	10.17	11.00
Office and administrative support occupations	13.51	13.06
Farming, fishing, and forestry occupations	10.63	10.85
Construction and extraction occupations	12.85	14.10
Installation, maintenance and repair occupations	16.99	16.19
Production occupations	17.81	14.75
Transportation and material moving occupations	13.87	12.65

Source: *Economic Modeling Specialists, Inc.*

EDUCATION

High School Graduates

From 1995 to 2005 (latest data available), the number of Berkeley County students receiving high school diplomas rose by 140 (11%). In South Carolina, on the other hand, the number of high school diplomas increased 9% from 1995 to 2005. A total of 1,408 people received high school diplomas in Berkeley County in 2005. Berkeley County had 179 more 12th grade students in 2004-05 than in 1994-95. Also, the number of Berkeley County students not passing the exit exam who received a certificate of completion instead of a diploma was up by 52 (to 87) over the 1995-2005 period.




Source: National Center for Education Statistics.

Higher Education Graduates

Over 2,000 more students graduated from higher educational institutions in the Charleston region in 2007 than in 1997, an increase of 32%. The greatest numerical increase was in the healthcare field.

Program	1997	2007	Change	% Change
Agriculture, agriculture operations, and related sciences	36	8	-28	-78
Area, ethnic, cultural, and gender studies	--	4	--	--
Biological and biomedical sciences	346	377	31	9
Business, management, marketing, and related support services	1,040	1,433	393	38
Communication, journalism, and related programs	191	291	100	52
Communications technologies/technicians and support services	25	25	0	0
Computer and information sciences and support services	153	237	84	55
Construction trades	1	1	0	0
Education	911	713	-198	-22
Engineering technologies/technicians	168	223	55	33
Engineering	67	74	7	10
English language and literature/letters	131	117	-14	-11
Family and consumer sciences/human sciences	140	231	91	65
Foreign languages, literatures, and linguistics	40	123	83	208
Health professions and related clinical sciences	1,307	1,907	600	46
Social sciences and history	444	535	91	20
Legal professions and studies	58	75	17	29
Liberal arts and sciences, general studies and humanities	323	369	46	14
Mathematics and statistics	64	60	-4	-6
Mechanic and repair technologies/technicians	86	164	78	91
Multi/interdisciplinary studies	29	93	64	221
Natural resources and conservation	34	30	-4	-12
Parks, recreation, leisure, and fitness studies	1	66	65	6,500
Personal and culinary services	85	222	137	161
Philosophy and religious studies	39	70	31	79
Physical sciences	78	96	18	23
Precision production	141	54	-87	-62
Psychology	257	309	52	20
Public administration and social service professions	100	110	10	10
Science technologies/technicians	23	13	-10	-43
Security and protective services	116	300	184	159
Theology and religious vocations	4	21	17	425
Visual and performing arts	136	295	159	117
TOTAL	6,574	8,646	2,072	32

Source: National Center for Education Statistics (Integrated Post Secondary Education System).



Data for these schools: Beta Tech, Charleston Southern University, Citadel Military College of South Carolina, Claflin University, College of Charleston, Denmark Technical College, Medical University of South Carolina, Miller-Motte Technical College, Orangeburg Calhoun Technical College, South Carolina State University, Southern Methodist College, Trident Technical College, Voorhees College, Williamsburg Technical College.

OCCUPATIONS

Occupational Projections

All occupational groups are projected to grow faster in Berkeley County than in the state except for the following:

- Food preparation and serving related
- Farming, fishing and forestry
- Production

See **Appendix A** for detailed occupational information.

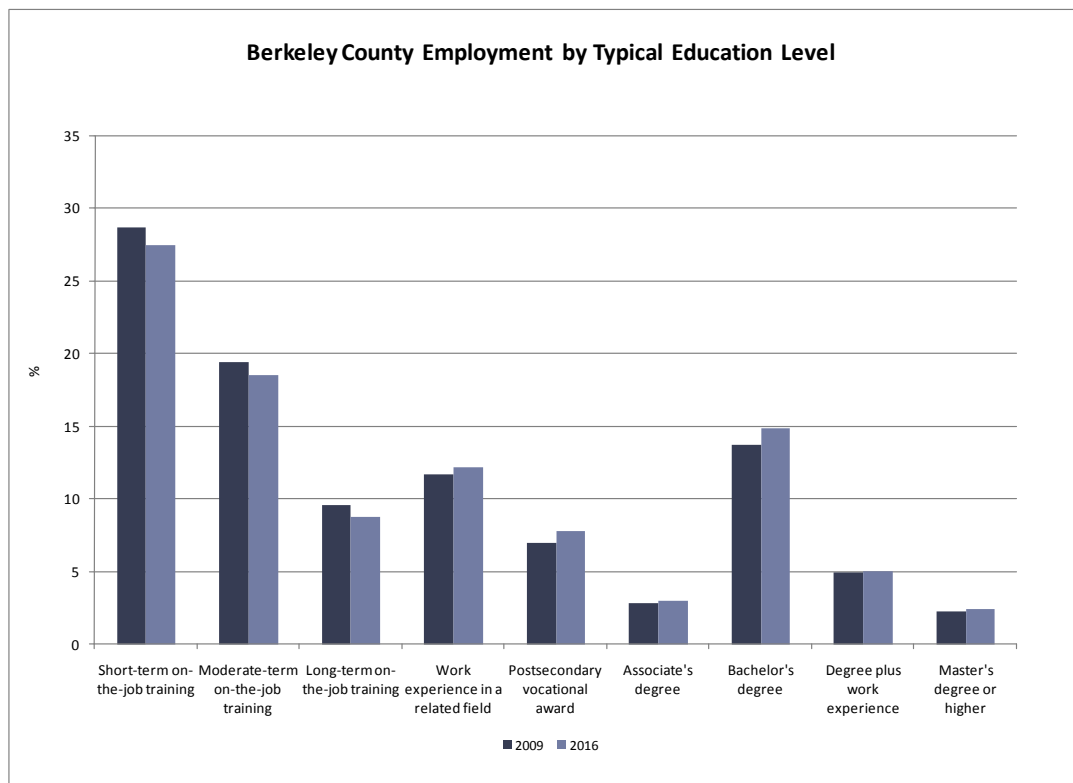
Occupation	2009-2016 Berkeley County Projected Growth (%)	2009-2016 SC Projected Growth (%)
Management occupations	28	13
Business and financial operations occupations	30	15
Computer and mathematical science occupations	35	15
Architecture and engineering occupations	41	11
Life, physical and social science occupations	16	10
Community and social services occupations	17	9
Legal occupations	29	17
Education, training and library occupations	22	10
Arts, design, entertainment, sports and media occupations	27	13
Healthcare practitioners and technical occupations	30	17
Healthcare support occupations	35	20
Protective service occupations	26	10
Food preparation and serving related occupations	9	9
Building and grounds cleaning and maintenance occupations	37	18
Personal care and service occupations	14	6
Sales and related occupations	28	16
Office and administrative support occupations	22	8
Farming, fishing and forestry occupations	5	6
Construction and extraction occupations	18	12
Installation, maintenance and repair occupations	21	12
Production occupations	-13	-1
Transportation and material moving occupations	16	7

Source: Economic Modeling Specialists, Inc.

Occupational Education Requirements

The trend for occupational growth shows that there will be growth in jobs across skill levels. Based on employment projections, Berkeley County is expected to see growth in requirements for the following specific levels of education and experience:

- Work experience in a related field
- Postsecondary vocational award
- Associate's degree
- Bachelor's degree
- Degree plus work experience
- Master's degree or higher



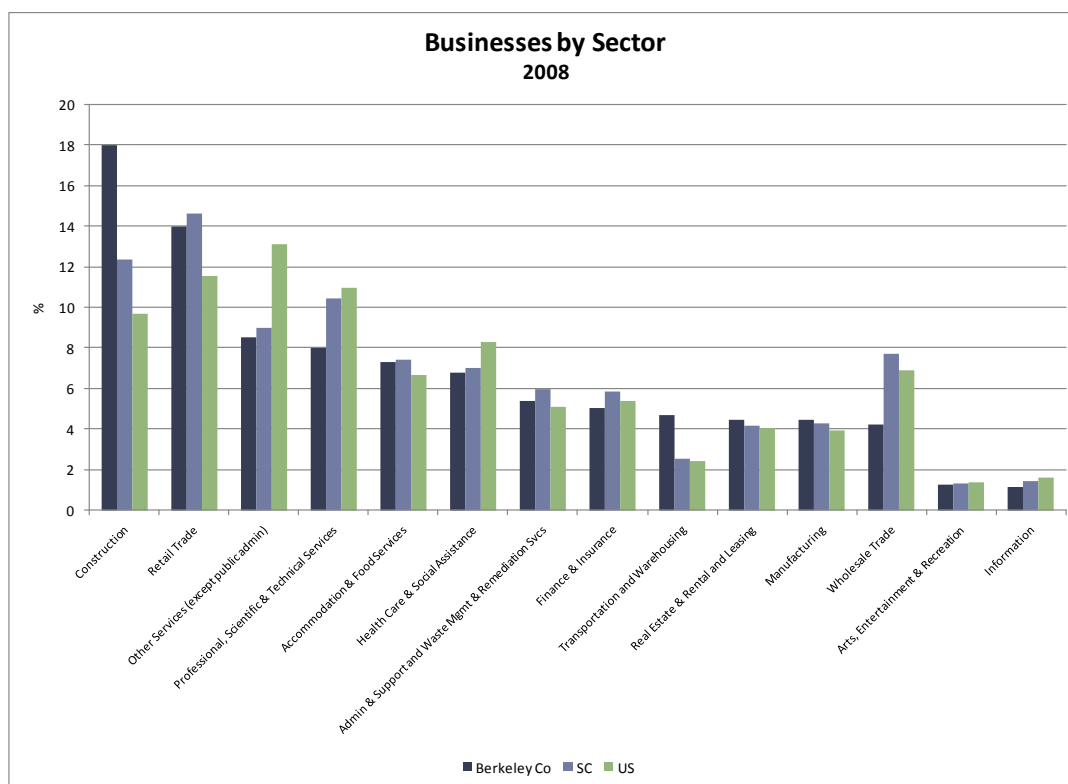
Source: Economic Modeling Specialists, Inc

INDUSTRY

Businesses by Sector

Berkeley County had higher percentages of businesses than South Carolina and the nation in the following sectors:

- Construction
- Transportation and warehousing
- Real estate and rental and leasing
- Manufacturing



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Growth in Number of Businesses

The number of private businesses in Berkeley County rose by 16% from 2003 to 2008, compared to a 3% increase for the state. For industry definitions, this analysis uses the North American Industry Classification System (NAICS), the U.S. standard for industry classification.

At the three-digit NAICS code level, Berkeley County had higher growth in 18 industries compared to South Carolina and the U.S. Below is a list of those 18 industries along with their respective growth rates.

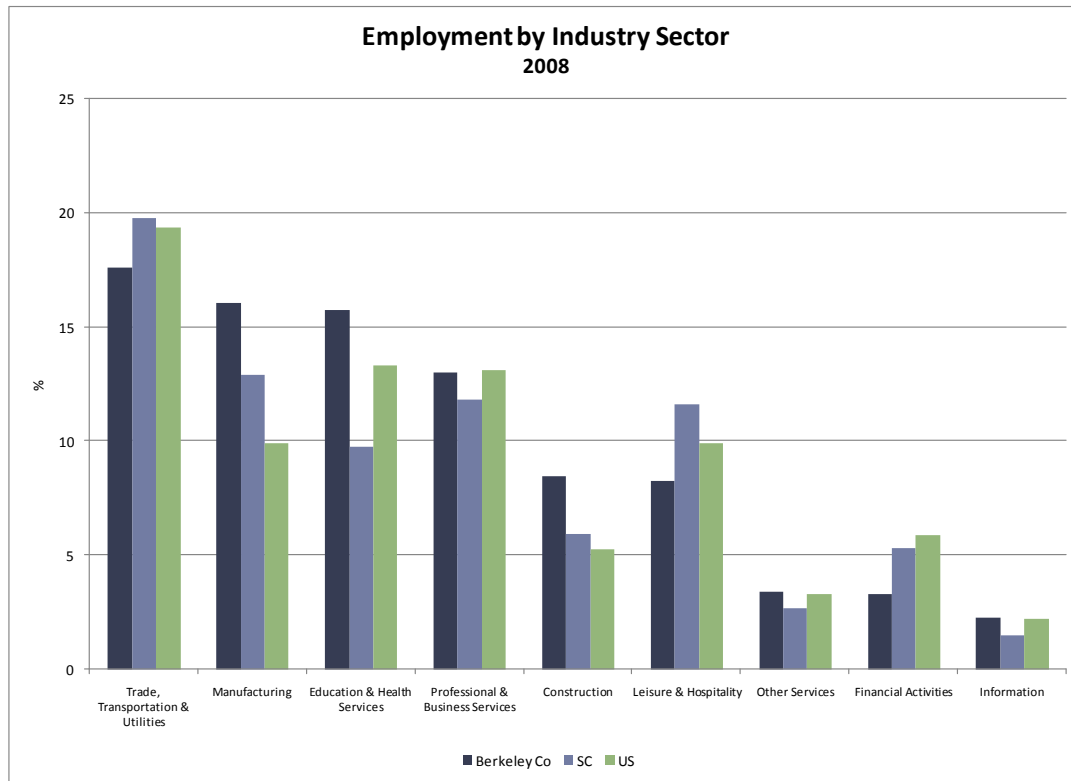
See **Appendix B** for information on all industries.

Industry	2003-2008 Growth (%)		
	Berkeley Co.	SC	US
Heavy and Civil Engineering Construction	40.7	4.2	-0.5
Food Manufacturing	66.7	-6.0	-2.1
Chemical Manufacturing	25.0	14.8	5.1
Nonmetallic Mineral Product Manufacturing	16.7	14.1	4.1
Primary Metal Manufacturing	25.0	18.1	-3.1
Fabricated Metal Product Manufacturing	9.1	0.6	-0.9
Merchant Wholesalers, Durable Goods	41.7	-5.9	-3.6
Food and Beverage Stores	2.6	-9.7	-0.1
Health and Personal Care Stores	75.0	16.3	19.9
Gasoline Stations	16.3	-0.3	-2.2
Clothing and Clothing Accessories Stores	10.5	-1.9	5.8
General Merchandise Stores	35.7	18.1	13.0
Credit Intermediation and Related Activities	21.7	6.5	16.6
Real Estate	47.4	22.1	18.2
Social Assistance	45.5	1.0	34.3
Accommodation	41.2	0.1	4.9
Religious, Grantmaking, Civic, Professional, and Similar Organizations	46.7	18.3	4.1
Private Households	143.5	21.2	22.1

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Employment by Sector

Berkeley County has a larger than average share of its jobs in manufacturing, education and health services, construction, and information.



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Industry Analysis

Screening Criteria

Industry sectors were rated on six factors:

- | | |
|------------------------------------|---------------------------------|
| • 2003-2008 employment growth | Competitive effect ¹ |
| • 2003-2008 employment growth rate | Average annual wage |
| • Location quotient ² | Projected growth |

Using those factors, sectors were awarded “stars” based on meeting the following criteria:

- 2003-2008 employment growth of 75 or more (Did the sector add a significant number of jobs?)
- 2003-2008 employment growth rate greater than 18% (overall county job growth over the period) (Did the sector add jobs at an above-average rate?)
- Location quotient of at least 1.25 (Does the sector have a significant concentration in the county?)
- Competitive effect greater than 0 (Did the sector add jobs beyond national growth overall and in the sector?)
- Average annual wage greater than \$41,340 (2008 average for the county) (Does the sector pay wages greater than average for the county?)
- Average or above average projected growth (Is the sector expected to add jobs?)

Industries of Note

Based on these criteria, machinery manufacturing is a “six star” sector in Berkeley County.

Industry sectors that generate wealth from outside the area are referred to as the region’s base economy. Base economy sectors are important to an area’s economic well-being. Machinery manufacturing fits the base economy criteria.

“Five star” sectors for Berkeley County are:

- Miscellaneous manufacturing (projected to decline)
- Durable good merchant wholesalers (location quotient below 1.25)
- Building material and garden equipment and supplies dealers (below-average wages)
- Rental and leasing services (below-average wages)
- Professional, scientific and technical services (location quotient below 1.25)
- Educational services (location quotient below 1.25)
- Amusement, gambling and recreation industries (below-average wages)
- Repair and maintenance (below-average wages)

Miscellaneous manufacturing, wholesalers, and professional, scientific and technical services fit the base economy criteria. Amusement and recreation may fit the criteria to the extent Berkeley County serves as a tourist destination.

Appendix C has information on all factors for all sectors for Berkeley County.

¹ *Competitive Effect: based on shift-share analysis; represents the change in employment in the sector in the county after accounting for overall US employment growth and growth/decline in the sector in the US.*

² *Location Quotient: percentage of employment in the sector in the county divided by the percentage of employment in that sector in the US; gives an indication of how concentrated employment in the sector is in the county compared to the US; based on 2008 data.*

MOVING FORWARD

The South Carolina Department of Commerce appreciates the opportunity to provide this base analysis of Berkeley County's labor market. We hope that it will help in advancing the progress of Berkeley County's economic development.

What's been done so far?

This analysis identifies the region's assets—both current and future—at a macro level. Labor Market Information (LMI) at the S.C. Department of Commerce developed a Base Labor Analysis report providing an overview of the region's population, industries, occupations, and educational assets. Additionally, these findings were benchmarked against the state and the nation.

What's next?

Because local knowledge is required to interpret and apply the findings appropriately, the Berkeley Base Labor Analysis should be used with local stakeholders to identify and define key, targeted industry clusters. Some items to consider when defining these clusters may include the following.

1. *What is Berkeley's economic base?*

In order for an economy to grow, it must have a base (export) sector that generates wealth from beyond its borders. Industries in the economic base (manufacturing, scientific and technology services, warehouse and distribution, financial services, regional healthcare, etc.) typically provide occupations with higher pay and benefits as well as better human capital development and promotion opportunities. A successful economic base stimulates the development of the non-base sector (housing, schools, retail, restaurants, personal services, etc.). It also propels the local tax base which, in turn, provides support to community services.

2. *What are strategies to assist low-wage citizens in non-base economy jobs?*

Although the economic base is the driver for long-term growth in a region, implementable strategies for developing job opportunities for low-skilled individuals is a priority for community economic well-being. This need must also be kept in mind when defining target industry clusters.

3. *What other factors are vital to Berkeley and its community?*

Over and above pure economic considerations, what is important to the citizens of the Berkeley community? How does Berkeley want to be perceived? What quality of life issues affect Berkeley? These questions may impact the types of industries desired for the area.

How Labor Market Information at the S.C. Department of Commerce can help.

Once local stakeholders have identified key industry clusters vital to the future economic development of the region, LMI can provide more in-depth analysis of each of these industries, their occupations, business establishments, and educational requirements.

1. Detailed Industry Analysis

For each identified industry, LMI can develop a detailed analysis of each sector, including employment, projected growth, staffing patterns, location quotients, and employers. Additionally, the analysis will examine the largest, fastest growing, and declining sectors within the industry cluster.

2. Detailed Occupational Analysis

At this point, the occupations—classified by SOC codes—that make up each of the identified industry clusters can be analyzed in detail. This analysis will include employment, average earnings, educational requirements, projected growth, and completers from available local training programs. It will culminate in identifying gaps between the number of occupations required to sustain and advance industry growth and the number of skilled workers (as identified by educational requirements and program completers) available to fulfill these positions.

3. Identification of Implementable Recommendations

LMI will utilize the findings of the analyses to develop a set of implementable recommendations. These may include recommendations to align community college programs with economic development goals along with others. Finally, local knowledge will once again be called upon to review the findings and develop an action plan for the implementation of feasible solutions.

Appendix A: Occupational Projections for Berkeley County

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-1011	Chief executives	646	828	182	28	1.55	31.22	Degree plus work experience
11-1021	General and operations managers	681	786	105	15	1.04	41.32	Degree plus work experience
11-1031	Legislators	49	57	8	16	2.07	9.12	Degree plus work experience
11-2011	Advertising and promotions managers	12	14	2	17	0.62	27.37	Degree plus work experience
11-2021	Marketing managers	70	90	20	29	0.91	32.82	Degree plus work experience
11-2022	Sales managers	127	154	27	21	0.93	41.15	Degree plus work experience
11-2031	Public relations managers	23	30	7	30	1.02	34.37	Degree plus work experience
11-3011	Administrative services managers	62	78	16	26	0.66	33.84	Degree plus work experience
11-3021	Computer and information systems managers	102	135	33	32	0.94	50.22	Degree plus work experience
11-3031	Financial managers	203	259	56	28	0.85	28.43	Degree plus work experience

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-3042	Training and development managers	12	16	4	33	0.93	37.64	Degree plus work experience
11-3049	Human resources managers, all other	16	20	4	25	0.66	31.72	Degree plus work experience
11-3051	Industrial production managers	78	64	-14	-18	1.45	44.63	Work experience in a related field
11-3061	Purchasing managers	20	22	2	10	0.83	44.40	Degree plus work experience
11-3071	Transportation, storage, and distribution managers	33	43	10	30	0.87	26.24	Work experience in a related field
11-9011	Farm, ranch, and other agricultural managers	100	110	10	10	0.51	17.18	Degree plus work experience
11-9012	Farmers and ranchers	283	280	-3	-1	0.45	6.55	Long-term on-the-job training
11-9021	Construction managers	661	853	192	29	2.53	14.60	Bachelor's degree
11-9031	Education administrators, preschool and child care center/program	38	50	12	32	1.05	11.82	Degree plus work experience
11-9032	Education administrators, elementary and secondary school	107	130	23	21	1.13	38.94	Degree plus work experience
11-9033	Education administrators, postsecondary	27	36	9	33	0.51	26.02	Degree plus work experience

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
11-9039	Education administrators, all other	27	36	9	33	1.17	23.18	Degree plus work experience
11-9041	Engineering managers	99	138	39	39	1.49	47.02	Degree plus work experience
11-9051	Food service managers	175	221	46	26	1.06	10.02	Work experience in a related field
11-9081	Lodging managers	63	107	44	70	1.22	11.21	Work experience in a related field
11-9111	Medical and health services managers	74	93	19	26	0.62	26.84	Degree plus work experience
11-9141	Property, real estate, and community association managers	674	1,045	371	55	1.54	7.19	Bachelor's degree
11-9151	Social and community service managers	25	31	6	24	0.42	16.45	Bachelor's degree
11-9199	Managers, all other	723	935	212	29	1.21	10.75	Work experience in a related field
13-1011	Agents and business managers of artists, performers, and athletes	15	21	6	40	0.82	6.58	Degree plus work experience
13-1022	Wholesale and retail buyers, except farm products	59	69	10	17	0.98	19.82	Work experience in a related field
13-1023	Purchasing agents, except wholesale, retail, and farm products	94	103	9	10	0.87	24.78	Work experience in a related field
13-1031	Claims adjusters, examiners, and investigators	32	34	2	6	0.28	13.11	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
13-1032	Insurance appraisers, auto damage	15	17	2	13	1.09	7.83	Long-term on-the-job training
13-1041	Compliance officers, except agriculture, construction, health and safety, and transportation	85	95	10	12	0.94	18.91	Long-term on-the-job training
13-1051	Cost estimators	139	172	33	24	1.69	22.16	Work experience in a related field
13-1071	Employment, recruitment, and placement specialists	32	41	9	28	0.41	23.49	Bachelor's degree
13-1072	Compensation, benefits, and job analysis specialists	29	37	8	28	0.60	19.12	Bachelor's degree
13-1073	Training and development specialists	59	77	18	31	0.71	28.75	Bachelor's degree
13-1079	Human resources, training, and labor relations specialists, all other	45	55	10	22	0.50	20.41	Bachelor's degree
13-1081	Logisticians	49	56	7	14	1.34	28.18	Bachelor's degree
13-1111	Management analysts	339	443	104	31	0.90	20.82	Degree plus work experience
13-1121	Meeting and convention planners	32	41	9	28	1.12	15.47	Bachelor's degree
13-1199	Business operation specialists, all other	127	165	38	30	0.32	25.62	Bachelor's degree
13-2011	Accountants and auditors	542	694	152	28	0.94	19.87	Bachelor's degree
13-2021	Appraisers and assessors of real estate	254	390	136	54	1.62	7.61	Postsecondary vocational award
13-2031	Budget analysts	11	13	2	18	0.47	25.59	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
13-2041	Credit analysts	18	21	3	17	0.71	25.09	Bachelor's degree
13-2051	Financial analysts	63	93	30	48	0.44	10.50	Bachelor's degree
13-2052	Personal financial advisors	195	285	90	46	0.74	8.37	Bachelor's degree
13-2053	Insurance underwriters	12	13	1	8	0.30	13.42	Bachelor's degree
13-2071	Loan counselors	14	16	2	14	0.77	15.26	Bachelor's degree
13-2072	Loan officers	62	77	15	24	0.51	20.89	Bachelor's degree
13-2082	Tax preparers	52	62	10	19	1.27	8.55	Moderate-term on-the-job training
13-2099	Financial specialists, all other	35	34	-1	-3	0.57	18.20	Bachelor's degree
15-1011	Computer and information scientists, research	60	82	22	37	2.46	35.98	Doctoral degree
15-1021	Computer programmers	352	399	47	13	2.08	31.04	Bachelor's degree
15-1031	Computer software engineers, applications	117	174	57	49	0.58	33.97	Bachelor's degree
15-1032	Computer software engineers, systems software	201	288	87	43	1.30	31.03	Bachelor's degree
15-1041	Computer support specialists	195	248	53	27	0.92	23.41	Associate's degree
15-1051	Computer systems analysts	200	284	84	42	1.01	33.11	Bachelor's degree
15-1061	Database administrators	57	79	22	39	1.24	29.32	Bachelor's degree
15-1071	Network and computer systems administrators	141	198	57	40	1.10	28.63	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
15-1081	Network systems and data communications analysts	144	230	86	60	1.24	29.91	Bachelor's degree
15-1099	Computer specialists, all other	60	80	20	33	0.71	39.36	Associate's degree
15-2031	Operations research analysts	15	18	3	20	0.62	34.25	Master's degree
17-1011	Architects, except landscape and naval	166	247	81	49	3.09	24.75	Bachelor's degree
17-1012	Landscape architects	41	54	13	32	1.89	16.03	Bachelor's degree
17-1022	Surveyors	72	112	40	56	3.33	21.60	Bachelor's degree
17-2041	Chemical engineers	12	12	0	0	1.00	42.01	Bachelor's degree
17-2051	Civil engineers	216	322	106	49	1.94	32.17	Bachelor's degree
17-2061	Computer hardware engineers	75	101	26	35	2.67	38.77	Bachelor's degree
17-2071	Electrical engineers	109	162	53	49	1.94	39.39	Bachelor's degree
17-2072	Electronics engineers, except computer	165	240	75	45	3.11	36.25	Bachelor's degree
17-2081	Environmental engineers	38	60	22	58	1.88	37.87	Bachelor's degree
17-2111	Health and safety engineers, except mining safety engineers and inspectors	15	16	1	7	1.51	24.22	Bachelor's degree
17-2112	Industrial engineers	103	121	18	17	1.37	35.27	Bachelor's degree
17-2131	Materials engineers	11	12	1	9	1.26	36.36	Bachelor's degree
17-2141	Mechanical engineers	148	206	58	39	1.79	37.43	Bachelor's degree
17-2161	Nuclear engineers	24	29	5	21	1.71	32.11	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
17-2199	Engineers, all other	42	55	13	31	0.63	30.65	Bachelor's degree
17-3011	Architectural and civil drafters	107	148	41	38	2.52	23.62	Postsecondary vocational award
17-3012	Electrical and electronics drafters	29	40	11	38	2.10	24.84	Postsecondary vocational award
17-3013	Mechanical drafters	28	39	11	39	1.00	23.80	Postsecondary vocational award
17-3022	Civil engineering technicians	64	92	28	44	1.99	22.92	Associate's degree
17-3023	Electrical and electronic engineering technicians	198	274	76	38	3.40	30.75	Associate's degree
17-3025	Environmental engineering technicians	23	35	12	52	2.74	23.77	Associate's degree
17-3026	Industrial engineering technicians	23	21	-2	-9	0.93	26.90	Associate's degree
17-3027	Mechanical engineering technicians	44	64	20	45	2.67	24.84	Associate's degree
17-3031	Surveying and mapping technicians	104	158	54	52	3.49	16.44	Moderate-term on-the-job training
19-2031	Chemists	26	19	-7	-27	0.86	34.99	Bachelor's degree
19-2041	Environmental scientists and specialists, including health	14	20	6	43	0.43	26.35	Master's degree
19-2042	Geoscientists, except hydrologists and geographers	21	31	10	48	1.32	18.76	Master's degree
19-3021	Market research analysts	49	64	15	31	0.50	22.08	Bachelor's degree
19-3022	Survey researchers	16	20	4	25	0.77	11.61	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
19-3031	Clinical, counseling, and school psychologists	45	59	14	31	0.68	18.66	Doctoral degree
19-3032	Industrial-organizational psychologists	28	38	10	36	0.93	13.11	Master's degree
19-3039	Psychologists, all other	29	39	10	34	0.87	14.02	Master's degree
19-3051	Urban and regional planners	12	15	3	25	0.90	21.82	Master's degree
19-4031	Chemical technicians	63	39	-24	-38	2.68	23.09	Associate's degree
19-4051	Nuclear technicians	79	94	15	19	22.49	34.80	Associate's degree
19-4091	Environmental science and protection technicians, including health	18	27	9	50	1.33	19.95	Associate's degree
21-1012	Educational, vocational, and school counselors	71	87	16	23	0.69	23.26	Master's degree
21-1015	Rehabilitation counselors	49	57	8	16	0.97	12.97	Master's degree
21-1021	Child, family, and school social workers	82	98	16	20	0.71	17.33	Bachelor's degree
21-1022	Medical and public health social workers	34	44	10	29	0.62	17.43	Bachelor's degree
21-1023	Mental health and substance abuse social workers	14	17	3	21	0.24	11.63	Master's degree
21-1029	Social workers, all other	60	71	11	18	1.90	14.78	Bachelor's degree
21-1093	Social and human service assistants	92	109	17	18	0.66	9.80	Moderate-term on-the-job training
21-1099	Community and social service specialists, all other	19	23	4	21	0.41	11.76	Bachelor's degree
21-2011	Clergy	81	85	4	5	0.82	7.22	Master's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
21-2021	Directors, religious activities and education	38	40	2	5	0.82	6.84	Bachelor's degree
21-2099	Religious workers, all other	18	19	1	6	0.80	6.60	Bachelor's degree
23-1011	Lawyers	167	205	38	23	0.53	22.47	First professional degree
23-2011	Paralegals and legal assistants	71	95	24	34	0.73	16.63	Associate's degree
23-2091	Court reporters	18	26	8	44	1.17	10.48	Postsecondary vocational award
23-2092	Law clerks	20	28	8	40	0.97	10.38	Bachelor's degree
23-2093	Title examiners, abstractors, and searchers	25	34	9	36	0.81	11.64	Moderate-term on-the-job training
23-2099	Legal support workers, all other	19	27	8	42	0.79	10.90	Bachelor's degree
25-1099	Postsecondary teachers	201	273	72	36	0.31	50.13	Doctoral degree
25-2011	Preschool teachers, except special education	203	252	49	24	0.98	8.96	Postsecondary vocational award
25-2012	Kindergarten teachers, except special education	96	119	23	24	1.25	26.19	Bachelor's degree
25-2021	Elementary school teachers, except special education	729	895	166	23	1.20	24.98	Bachelor's degree
25-2022	Middle school teachers, except special and vocational education	337	408	71	21	1.29	24.40	Bachelor's degree
25-2023	Vocational education teachers, middle school	38	44	6	16	2.33	19.63	Degree plus work experience

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
25-2031	Secondary school teachers, except special and vocational education	473	554	81	17	1.15	27.17	Bachelor's degree
25-2032	Vocational education teachers, secondary school	32	36	4	13	0.80	25.55	Degree plus work experience
25-2041	Special education teachers, preschool, kindergarten, and elementary school	60	76	16	27	0.68	26.03	Bachelor's degree
25-2042	Special education teachers, middle school	30	37	7	23	0.76	24.65	Bachelor's degree
25-2043	Special education teachers, secondary school	57	68	11	19	1.01	22.68	Bachelor's degree
25-3011	Adult literacy, remedial education, and GED teachers and instructors	48	62	14	29	0.81	12.94	Bachelor's degree
25-3021	Self-enrichment education teachers	116	144	28	24	1.06	21.04	Work experience in a related field
25-3099	Teachers and instructors, all other	115	142	27	23	0.46	16.09	Bachelor's degree
25-4021	Librarians	66	76	10	15	1.07	23.34	Master's degree
25-4031	Library technicians	66	79	13	20	1.46	12.87	Postsecondary vocational award
25-9031	Instructional coordinators	42	56	14	33	0.83	32.29	Master's degree
25-9041	Teacher assistants	477	572	95	20	0.90	11.76	Short-term on-the-job training
27-1011	Art directors	37	50	13	35	0.80	6.72	Degree plus work experience
27-1012	Craft artists	36	48	12	33	1.02	6.73	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
27-1013	Fine artists, including painters, sculptors, and illustrators	37	49	12	32	1.01	6.97	Long-term on-the-job training
27-1014	Multi-media artists and animators	40	54	14	35	0.87	8.40	Bachelor's degree
27-1019	Artists and related workers, all other	36	48	12	33	0.99	6.63	Long-term on-the-job training
27-1021	Commercial and industrial designers	27	34	7	26	1.00	9.83	Bachelor's degree
27-1022	Fashion designers	26	33	7	27	1.18	8.90	Associate's degree
27-1023	Floral designers	45	53	8	18	1.30	9.26	Moderate-term on-the-job training
27-1024	Graphic designers	82	110	28	34	0.87	19.71	Bachelor's degree
27-1025	Interior designers	34	45	11	32	0.97	9.96	Associate's degree
27-1026	Merchandise displayers and window trimmers	29	36	7	24	0.78	9.54	Moderate-term on-the-job training
27-1027	Set and exhibit designers	24	32	8	33	1.31	8.34	Bachelor's degree
27-1029	Designers, all other	24	31	7	29	1.20	8.23	Bachelor's degree
27-2011	Actors	20	27	7	35	0.57	6.95	Long-term on-the-job training
27-2012	Producers and directors	34	44	10	29	0.72	29.85	Degree plus work experience

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
27-2021	Athletes and sports competitors	17	23	6	35	1.00	11.10	Long-term on-the-job training
27-2022	Coaches and scouts	50	63	13	26	0.63	23.26	Long-term on-the-job training
27-2023	Umpires, referees, and other sports officials	19	26	7	37	1.18	7.45	Long-term on-the-job training
27-2041	Music directors and composers	61	80	19	31	0.93	6.57	Degree plus work experience
27-2042	Musicians and singers	89	112	23	26	0.97	7.26	Long-term on-the-job training
27-2099	Entertainers and performers, sports and related workers, all other	32	39	7	22	0.84	6.94	Long-term on-the-job training
27-3031	Public relations specialists	69	89	20	29	0.64	18.96	Bachelor's degree
27-3041	Editors	26	34	8	31	0.45	14.51	Bachelor's degree
27-3042	Technical writers	28	38	10	36	1.27	28.24	Bachelor's degree
27-3043	Writers and authors	112	154	42	38	0.86	6.73	Bachelor's degree
27-3091	Interpreters and translators	52	61	9	17	1.00	13.07	Long-term on-the-job training
27-3099	Media and communication workers, all other	46	53	7	15	0.98	12.70	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
27-4011	Audio and video equipment technicians	13	18	5	38	0.70	12.53	Long-term on-the-job training
27-4021	Photographers	297	347	50	17	1.11	10.67	Long-term on-the-job training
29-1011	Chiropractors	28	48	20	71	1.25	28.79	First professional degree
29-1021	Dentists, general	31	38	7	23	0.86	63.54	First professional degree
29-1031	Dietitians and nutritionists	18	23	5	28	0.67	18.34	Bachelor's degree
29-1041	Optometrists	18	28	10	56	0.97	27.19	First professional degree
29-1051	Pharmacists	114	155	41	36	1.14	44.59	First professional degree
29-1069	Physicians and surgeons	178	236	58	33	0.57	39.09	First professional degree
29-1111	Registered nurses	630	811	181	29	0.66	25.22	Associate's degree
29-1122	Occupational therapists	24	32	8	33	0.59	22.57	Master's degree
29-1123	Physical therapists	48	70	22	46	0.65	25.94	Master's degree
29-1126	Respiratory therapists	33	42	9	27	0.87	23.03	Associate's degree
29-1127	Speech-language pathologists	32	40	8	25	0.60	19.44	Master's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
29-1129	Therapists, all other	17	23	6	35	0.73	11.88	Bachelor's degree
29-1131	Veterinarians	23	27	4	17	0.85	30.57	First professional degree
29-1199	Health diagnosing and treating practitioners, all other	18	24	6	33	0.60	15.06	Bachelor's degree
29-2011	Medical and clinical laboratory technologists	32	39	7	22	0.52	23.33	Bachelor's degree
29-2012	Medical and clinical laboratory technicians	21	27	6	29	0.38	14.25	Associate's degree
29-2021	Dental hygienists	58	80	22	38	0.89	24.97	Associate's degree
29-2031	Cardiovascular technologists and technicians	12	16	4	33	0.66	20.58	Associate's degree
29-2034	Radiologic technologists and technicians	26	31	5	19	0.33	18.44	Associate's degree
29-2041	Emergency medical technicians and paramedics	21	25	4	19	0.28	16.55	Postsecondary vocational award
29-2052	Pharmacy technicians	88	93	5	6	0.72	10.56	Moderate-term on-the-job training
29-2056	Veterinary technologists and technicians	39	49	10	26	1.31	13.25	Associate's degree
29-2061	Licensed practical and licensed vocational nurses	105	144	39	37	0.38	13.69	Postsecondary vocational award
29-2071	Medical records and health information technicians	15	19	4	27	0.23	9.59	Associate's degree
29-2081	Opticians, dispensing	24	35	11	46	0.89	9.59	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
29-2099	Healthcare technologists and technicians, all other	21	26	5	24	0.66	11.00	Postsecondary vocational award
29-9011	Occupational health and safety specialists	15	17	2	13	0.76	23.32	Bachelor's degree
31-1011	Home health aides	215	272	57	27	0.58	7.80	Short-term on-the-job training
31-1012	Nursing aides, orderlies, and attendants	278	387	109	39	0.50	8.70	Postsecondary vocational award
31-1013	Psychiatric aides	39	49	10	26	0.77	9.14	Short-term on-the-job training
31-9011	Massage therapists	48	48	0	0	1.28	8.96	Postsecondary vocational award
31-9091	Dental assistants	77	104	27	35	0.69	14.88	Moderate-term on-the-job training
31-9092	Medical assistants	123	196	73	59	0.67	7.54	Moderate-term on-the-job training
31-9093	Medical equipment preparers	16	22	6	38	0.78	8.83	Short-term on-the-job training
31-9094	Medical transcriptionists	17	23	6	35	0.48	8.44	Postsecondary vocational award
31-9095	Pharmacy aides	22	28	6	27	0.94	7.93	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
31-9096	Veterinary assistants and laboratory animal caretakers	39	46	7	18	1.27	7.87	Short-term on-the-job training
31-9099	Healthcare support workers, all other	32	40	8	25	0.44	10.05	Short-term on-the-job training
33-1012	First-line supervisors/managers of police and detectives	18	22	4	22	0.54	27.60	Work experience in a related field
33-1021	First-line supervisors/managers of fire fighting and prevention workers	20	24	4	20	0.96	21.94	Work experience in a related field
33-1099	First-line supervisors/managers, protective service workers, all other	16	22	6	38	0.74	18.02	Work experience in a related field
33-2011	Fire fighters	219	271	52	24	2.01	12.54	Long-term on-the-job training
33-3012	Correctional officers and jailers	77	99	22	29	0.52	16.69	Moderate-term on-the-job training
33-3021	Detectives and criminal investigators	13	16	3	23	0.34	29.26	Work experience in a related field
33-3051	Police and sheriff's patrol officers	309	382	73	24	1.32	17.36	Long-term on-the-job training
33-9011	Animal control workers	11	13	2	18	1.67	11.90	Moderate-term on-the-job training
33-9021	Private detectives and investigators	38	59	21	55	1.49	7.50	Work experience in a related field

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
33-9031	Gaming surveillance officers and gaming investigators	24	37	13	54	1.76	6.67	Moderate-term on-the-job training
33-9032	Security guards	179	215	36	20	0.46	14.30	Short-term on-the-job training
33-9091	Crossing guards	12	14	2	17	0.48	9.62	Short-term on-the-job training
33-9092	Lifeguards, ski patrol, and other recreational protective service workers	78	97	19	24	1.74	8.41	Short-term on-the-job training
33-9099	Protective service workers, all other	24	29	5	21	0.69	10.25	Short-term on-the-job training
35-1011	Chefs and head cooks	30	34	4	13	0.66	13.16	Work experience in a related field
35-1012	First-line supervisors/managers of food preparation and serving workers	287	318	31	11	0.88	12.10	Work experience in a related field
35-2011	Cooks, fast food	219	241	22	10	1.05	6.80	Short-term on-the-job training
35-2012	Cooks, institution and cafeteria	118	141	23	19	0.79	8.89	Moderate-term on-the-job training
35-2014	Cooks, restaurant	145	144	-1	-1	0.44	8.46	Long-term on-the-job training
35-2015	Cooks, short order	79	83	4	5	1.18	7.66	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
35-2021	Food preparation workers	257	278	21	8	0.77	7.20	Short-term on-the-job training
35-3011	Bartenders	125	137	12	10	0.65	6.62	Short-term on-the-job training
35-3021	Combined food preparation and serving workers, including fast food	670	779	109	16	0.67	6.58	Short-term on-the-job training
35-3022	Counter attendants, cafeteria, food concession, and coffee shop	171	187	16	9	0.89	7.25	Short-term on-the-job training
35-3031	Waiters and waitresses	410	405	-5	-1	0.47	6.55	Short-term on-the-job training
35-3041	Food servers, nonrestaurant	17	21	4	24	0.25	7.69	Short-term on-the-job training
35-9011	Dining room and cafeteria attendants and bartender helpers	55	58	3	5	0.36	6.55	Short-term on-the-job training
35-9021	Dishwashers	92	92	0	0	0.48	6.55	Short-term on-the-job training
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop	65	62	-3	-5	0.50	6.55	Short-term on-the-job training
37-1011	First-line supervisors/managers of housekeeping and janitorial workers	238	343	105	44	1.64	8.30	Work experience in a related field
37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	94	131	37	39	1.73	14.49	Work experience in a related field

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	561	632	71	13	0.68	10.18	Short-term on-the-job training
37-2012	Maids and housekeeping cleaners	793	1,099	306	39	1.02	6.58	Short-term on-the-job training
37-2019	Building cleaning workers, all other	454	688	234	52	2.22	6.56	Short-term on-the-job training
37-2021	Pest control workers	61	83	22	36	1.77	10.34	Moderate-term on-the-job training
37-3011	Landscaping and groundskeeping workers	602	846	244	41	1.59	10.20	Short-term on-the-job training
37-3012	Pesticide handlers, sprayers, and applicators, vegetation	84	123	39	46	2.09	8.52	Moderate-term on-the-job training
37-3013	Tree trimmers and pruners	77	114	37	48	1.78	7.29	Short-term on-the-job training
37-3019	Grounds maintenance workers, all other	74	110	36	49	2.02	6.72	Short-term on-the-job training
39-1011	Gaming supervisors	14	19	5	36	0.72	7.34	Work experience in a related field
39-1012	Slot key persons	12	17	5	42	0.79	6.56	Postsecondary vocational award
39-1021	First-line supervisors/managers of personal service workers	133	145	12	9	1.53	10.38	Work experience in a related field

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
39-2011	Animal trainers	41	38	-3	-7	1.19	6.99	Moderate-term on-the-job training
39-2021	Nonfarm animal caretakers	244	211	-33	-14	1.82	7.21	Short-term on-the-job training
39-3012	Gaming and sports book writers and runners	23	29	6	26	2.01	8.19	Short-term on-the-job training
39-3091	Amusement and recreation attendants	164	207	43	26	1.74	8.35	Short-term on-the-job training
39-3099	Entertainment attendants and related workers, all other	18	23	5	28	0.93	6.57	Moderate-term on-the-job training
39-5011	Barbers	28	19	-9	-32	1.57	6.57	Postsecondary vocational award
39-5012	Hairdressers, hairstylists, and cosmetologists	262	229	-33	-13	1.29	8.33	Postsecondary vocational award
39-5092	Manicurists and pedicurists	35	39	4	11	1.44	8.01	Postsecondary vocational award
39-6021	Tour guides and escorts	25	32	7	28	1.59	9.46	Moderate-term on-the-job training
39-9011	Child care workers	790	989	199	25	1.12	7.16	Short-term on-the-job training
39-9021	Personal and home care aides	217	276	59	27	0.64	6.95	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
39-9031	Fitness trainers and aerobics instructors	148	190	42	28	1.43	15.51	Postsecondary vocational award
39-9032	Recreation workers	128	159	31	24	0.99	8.32	Short-term on-the-job training
39-9041	Residential advisors	16	19	3	19	0.75	12.55	Moderate-term on-the-job training
39-9099	Personal care and service workers, all other	49	38	-11	-22	1.04	6.74	Short-term on-the-job training
41-1011	First-line supervisors/managers of retail sales workers	1,078	1,259	181	17	1.33	11.69	Work experience in a related field
41-1012	First-line supervisors/managers of non-retail sales workers	427	548	121	28	1.28	14.57	Work experience in a related field
41-2011	Cashiers, except gaming	1,178	1,174	-4	0	0.91	7.12	Short-term on-the-job training
41-2012	Gaming change persons and booth cashiers	28	33	5	18	1.18	13.56	Short-term on-the-job training
41-2021	Counter and rental clerks	126	153	27	21	0.76	10.63	Short-term on-the-job training
41-2022	Parts salespersons	82	92	10	12	1.04	15.43	Moderate-term on-the-job training
41-2031	Retail salespersons	1,297	1,606	309	24	0.72	10.09	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
41-3011	Advertising sales agents	20	28	8	40	0.25	19.57	Moderate-term on-the-job training
41-3021	Insurance sales agents	360	423	63	18	1.37	8.27	Bachelor's degree
41-3031	Securities, commodities, and financial services sales agents	140	203	63	45	0.60	9.05	Bachelor's degree
41-3041	Travel agents	47	63	16	34	1.14	10.20	Postsecondary vocational award
41-3099	Sales representatives, services, all other	302	439	137	45	1.08	15.17	Moderate-term on-the-job training
41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products	159	188	29	18	0.83	26.36	Moderate-term on-the-job training
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products	438	517	79	18	0.76	22.43	Moderate-term on-the-job training
41-9011	Demonstrators and product promoters	42	50	8	19	0.94	8.04	Moderate-term on-the-job training
41-9012	Models	19	22	3	16	1.21	6.55	Moderate-term on-the-job training
41-9021	Real estate brokers	1,148	1,787	639	56	1.74	7.07	Work experience in a related field
41-9022	Real estate sales agents	1,157	1,798	641	55	1.65	7.16	Postsecondary vocational award
41-9031	Sales engineers	27	35	8	30	0.93	22.67	Bachelor's degree

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
41-9041	Telemarketers	30	37	7	23	0.24	7.87	Short-term on-the-job training
41-9091	Door-to-door sales workers, news and street vendors, and related workers	555	645	90	16	1.51	6.55	Short-term on-the-job training
41-9099	Sales and related workers, all other	132	165	33	25	1.15	7.88	Moderate- term on-the- job training
43-1011	First-line supervisors/managers of office and administrative support workers	556	684	128	23	0.98	18.85	Work experience in a related field
43-2011	Switchboard operators, including answering service	65	69	4	6	1.15	9.13	Short-term on-the-job training
43-2021	Telephone operators	11	10	-1	-9	1.11	11.77	Short-term on-the-job training
43-3011	Bill and account collectors	167	224	57	34	1.10	12.41	Short-term on-the-job training
43-3021	Billing and posting clerks and machine operators	129	151	22	17	0.67	12.76	Moderate- term on-the- job training
43-3031	Bookkeeping, accounting, and auditing clerks	722	905	183	25	0.89	13.72	Moderate- term on-the- job training
43-3051	Payroll and timekeeping clerks	75	82	7	9	1.01	16.54	Moderate- term on-the- job training
43-3061	Procurement clerks	30	30	0	0	1.04	12.74	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-3071	Tellers	181	265	84	46	0.79	10.08	Short-term on-the-job training
43-4031	Court, municipal, and license clerks	30	37	7	23	0.71	15.07	Short-term on-the-job training
43-4041	Credit authorizers, checkers, and clerks	15	16	1	7	0.64	14.57	Short-term on-the-job training
43-4051	Customer service representatives	701	1,010	309	44	0.83	14.18	Moderate-term on-the-job training
43-4071	File clerks	64	58	-6	-9	0.81	7.48	Short-term on-the-job training
43-4081	Hotel, motel, and resort desk clerks	36	46	10	28	0.44	7.23	Short-term on-the-job training
43-4111	Interviewers, except eligibility and loan	67	83	16	24	0.72	16.27	Short-term on-the-job training
43-4121	Library assistants, clerical	33	39	6	18	0.73	9.47	Short-term on-the-job training
43-4131	Loan interviewers and clerks	36	43	7	19	0.46	11.10	Short-term on-the-job training
43-4141	New accounts clerks	19	22	3	16	0.60	10.61	Work experience in a related field
43-4151	Order clerks	38	35	-3	-8	0.44	11.51	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-4161	Human resources assistants, except payroll and timekeeping	52	62	10	19	0.85	16.69	Short-term on-the-job training
43-4171	Receptionists and information clerks	315	404	89	28	0.74	10.46	Short-term on-the-job training
43-4181	Reservation and transportation ticket agents and travel clerks	15	20	5	33	0.25	12.88	Short-term on-the-job training
43-4199	Information and record clerks, all other	43	39	-4	-9	0.56	12.67	Short-term on-the-job training
43-5011	Cargo and freight agents	34	49	15	44	1.06	16.01	Moderate-term on-the-job training
43-5021	Couriers and messengers	149	200	51	34	1.44	6.87	Short-term on-the-job training
43-5031	Police, fire, and ambulance dispatchers	45	57	12	27	1.26	13.92	Moderate-term on-the-job training
43-5032	Dispatchers, except police, fire, and ambulance	82	99	17	21	1.18	17.46	Moderate-term on-the-job training
43-5041	Meter readers, utilities	11	11	0	0	0.63	21.00	Short-term on-the-job training
43-5051	Postal service clerks	13	14	1	8	0.45	23.06	Short-term on-the-job training
43-5052	Postal service mail carriers	67	76	9	13	0.54	19.51	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-5053	Postal service mail sorters, processors, and processing machine operators	22	23	1	5	0.33	21.45	Short-term on-the-job training
43-5061	Production, planning, and expediting clerks	79	85	6	8	0.78	22.01	Short-term on-the-job training
43-5071	Shipping, receiving, and traffic clerks	286	307	21	7	1.07	15.17	Short-term on-the-job training
43-5081	Stock clerks and order fillers	499	467	-32	-6	0.73	10.48	Short-term on-the-job training
43-5111	Weighers, measurers, checkers, and samplers, recordkeeping	30	26	-4	-13	1.10	15.03	Short-term on-the-job training
43-6011	Executive secretaries and administrative assistants	367	473	106	29	0.60	17.44	Moderate-term on-the-job training
43-6012	Legal secretaries	103	139	36	35	0.78	10.49	Postsecondary vocational award
43-6013	Medical secretaries	139	186	47	34	0.67	9.60	Postsecondary vocational award
43-6014	Secretaries, except legal, medical, and executive	721	840	119	17	0.93	14.15	Moderate-term on-the-job training
43-9011	Computer operators	34	33	-1	-3	0.85	19.91	Moderate-term on-the-job training
43-9021	Data entry keyers	73	88	15	21	0.65	11.71	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
43-9022	Word processors and typists	49	69	20	41	0.75	8.42	Moderate-term on-the-job training
43-9031	Desktop publishers	27	37	10	37	1.24	10.96	Postsecondary vocational award
43-9041	Insurance claims and policy processing clerks	38	42	4	11	0.41	9.58	Moderate-term on-the-job training
43-9051	Mail clerks and mail machine operators, except postal service	21	22	1	5	0.38	11.01	Short-term on-the-job training
43-9061	Office clerks, general	941	1,168	227	24	0.83	12.03	Short-term on-the-job training
43-9199	Office and administrative support workers, all other	33	41	8	24	0.30	9.79	Short-term on-the-job training
45-1099	Supervisors, farming, fishing, and forestry workers	14	16	2	14	0.65	15.39	Work experience in a related field
45-2091	Agricultural equipment operators	12	14	2	17	0.47	10.62	Moderate-term on-the-job training
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse	134	156	22	16	0.52	11.03	Short-term on-the-job training
45-2093	Farmworkers, farm and ranch animals	15	18	3	20	0.44	11.47	Short-term on-the-job training
45-3011	Fishers and related fishing workers	91	80	-11	-12	2.83	6.66	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
45-4021	Fallers	11	11	0	0	1.61	12.29	Moderate-term on-the-job training
45-4022	Logging equipment operators	36	30	-6	-17	2.59	16.25	Moderate-term on-the-job training
47-1011	First-line supervisors/managers of construction trades and extraction workers	791	960	169	21	2.16	15.94	Work experience in a related field
47-2021	Brickmasons and blockmasons	66	69	3	5	1.37	12.51	Long-term on-the-job training
47-2022	Stonemasons	35	45	10	29	1.91	9.77	Long-term on-the-job training
47-2031	Carpenters	1,081	1,305	224	21	1.96	11.84	Long-term on-the-job training
47-2041	Carpet installers	28	36	8	29	1.35	9.81	Moderate-term on-the-job training
47-2042	Floor layers, except carpet, wood, and hard tiles	27	35	8	30	1.87	9.46	Moderate-term on-the-job training
47-2043	Floor sanders and finishers	34	42	8	24	2.68	10.37	Moderate-term on-the-job training
47-2044	Tile and marble setters	44	58	14	32	1.64	13.11	Long-term on-the-job training
47-2051	Cement masons and concrete finishers	94	114	20	21	1.30	12.26	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-2053	Terrazzo workers and finishers	13	16	3	23	2.52	11.09	Long-term on-the-job training
47-2061	Construction laborers	937	1,138	201	21	1.88	10.74	Moderate-term on-the-job training
47-2071	Paving, surfacing, and tamping equipment operators	29	34	5	17	1.31	13.56	Moderate-term on-the-job training
47-2072	Pile-driver operators	32	42	10	31	2.89	10.24	Moderate-term on-the-job training
47-2073	Operating engineers and other construction equipment operators	176	219	43	24	1.15	14.34	Moderate-term on-the-job training
47-2081	Drywall and ceiling tile installers	68	77	9	13	1.23	11.41	Moderate-term on-the-job training
47-2082	Tapers	37	47	10	27	1.65	9.78	Moderate-term on-the-job training
47-2111	Electricians	500	519	19	4	1.95	16.38	Long-term on-the-job training
47-2121	Glaziers	24	28	4	17	1.20	13.20	Long-term on-the-job training
47-2131	Insulation workers, floor, ceiling, and wall	23	23	0	0	2.15	13.22	Moderate-term on-the-job training
47-2132	Insulation workers, mechanical	20	21	1	5	1.74	15.33	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-2141	Painters, construction and maintenance	401	481	80	20	2.13	10.08	Moderate-term on-the-job training
47-2142	Paperhangers	11	15	4	36	1.92	9.48	Moderate-term on-the-job training
47-2151	Pipelayers	145	170	25	17	3.80	12.26	Moderate-term on-the-job training
47-2152	Plumbers, pipefitters, and steamfitters	191	205	14	7	1.12	14.07	Long-term on-the-job training
47-2161	Plasterers and stucco masons	15	18	3	20	0.85	10.96	Long-term on-the-job training
47-2181	Roofers	67	84	17	25	1.09	9.51	Moderate-term on-the-job training
47-2211	Sheet metal workers	58	59	1	2	0.98	13.35	Long-term on-the-job training
47-2221	Structural iron and steel workers	16	19	3	19	0.62	13.95	Long-term on-the-job training
47-3011	Helpers, brickmasons, blockmasons, stonemasons, and tile and marble setters	23	16	-7	-30	1.23	9.97	Short-term on-the-job training
47-3012	Helpers, carpenters	56	59	3	5	1.98	12.02	Short-term on-the-job training
47-3013	Helpers, electricians	148	141	-7	-5	4.15	11.21	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
47-3015	Helpers, pipelayers, plumbers, pipefitters, and steamfitters	70	67	-3	-4	2.49	12.39	Short-term on-the-job training
47-3019	Helpers, construction trades, all other	11	13	2	18	1.14	10.28	Short-term on-the-job training
47-4011	Construction and building inspectors	70	104	34	49	1.52	19.83	Work experience in a related field
47-4021	Elevator installers and repairers	11	11	0	0	1.24	34.15	Long-term on-the-job training
47-4031	Fence erectors	17	24	7	41	1.39	10.68	Moderate-term on-the-job training
47-4041	Hazardous materials removal workers	15	20	5	33	0.96	14.79	Moderate-term on-the-job training
47-4071	Septic tank servicers and sewer pipe cleaners	14	18	4	29	1.28	11.97	Moderate-term on-the-job training
47-5021	Earth drillers, except oil and gas	13	16	3	23	1.34	13.27	Moderate-term on-the-job training
49-1011	First-line supervisors/managers of mechanics, installers, and repairers	269	316	47	17	1.65	27.44	Work experience in a related field
49-2011	Computer, automated teller, and office machine repairers	69	92	23	33	1.14	11.43	Postsecondary vocational award
49-2022	Telecommunications equipment installers and repairers, except line installers	122	165	43	35	1.62	20.63	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-2092	Electric motor, power tool, and related repairers	12	15	3	25	1.22	11.13	Postsecondary vocational award
49-2094	Electrical and electronics repairers, commercial and industrial equipment	41	41	0	0	1.52	19.02	Postsecondary vocational award
49-2095	Electrical and electronics repairers, powerhouse, substation, and relay	20	23	3	15	2.34	34.50	Postsecondary vocational award
49-2097	Electronic home entertainment equipment installers and repairers	25	32	7	28	1.20	8.25	Postsecondary vocational award
49-2098	Security and fire alarm systems installers	23	32	9	39	0.87	10.92	Postsecondary vocational award
49-3011	Aircraft mechanics and service technicians	18	18	0	0	0.42	19.61	Postsecondary vocational award
49-3021	Automotive body and related repairers	92	118	26	28	1.41	12.35	Long-term on-the-job training
49-3022	Automotive glass installers and repairers	10	13	3	30	1.24	8.55	Long-term on-the-job training
49-3023	Automotive service technicians and mechanics	646	870	224	35	2.16	14.67	Postsecondary vocational award
49-3031	Bus and truck mechanics and diesel engine specialists	178	236	58	33	1.77	15.79	Postsecondary vocational award
49-3042	Mobile heavy equipment mechanics, except engines	112	146	34	30	2.34	19.16	Postsecondary vocational award

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-3051	Motorboat mechanics	12	16	4	33	0.99	8.10	Long-term on-the-job training
49-3052	Motorcycle mechanics	13	16	3	23	1.11	8.20	Long-term on-the-job training
49-3053	Outdoor power equipment and other small engine mechanics	21	25	4	19	1.48	10.11	Moderate-term on-the-job training
49-3093	Tire repairers and changers	79	99	20	25	2.28	11.06	Short-term on-the-job training
49-9012	Control and valve installers and repairers, except mechanical door	23	26	3	13	1.38	30.71	Moderate-term on-the-job training
49-9021	Heating, air conditioning, and refrigeration mechanics and installers	174	193	19	11	1.50	14.29	Long-term on-the-job training
49-9031	Home appliance repairers	41	50	9	22	1.39	7.18	Long-term on-the-job training
49-9041	Industrial machinery mechanics	284	268	-16	-6	2.78	23.62	Long-term on-the-job training
49-9042	Maintenance and repair workers, general	625	699	74	12	1.24	17.27	Moderate-term on-the-job training
49-9044	Millwrights	26	26	0	0	1.64	23.68	Long-term on-the-job training
49-9051	Electrical power-line installers and repairers	76	92	16	21	1.82	30.78	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
49-9052	Telecommunications line installers and repairers	35	42	7	20	0.54	16.58	Long-term on-the-job training
49-9062	Medical equipment repairers	22	24	2	9	1.37	10.92	Associate's degree
49-9091	Coin, vending, and amusement machine servicers and repairers	27	30	3	11	1.20	8.63	Moderate-term on-the-job training
49-9092	Commercial divers	23	33	10	43	1.97	6.64	Moderate-term on-the-job training
49-9093	Fabric menders, except garment	24	34	10	42	2.16	6.80	Moderate-term on-the-job training
49-9094	Locksmiths and safe repairers	49	75	26	53	3.19	10.47	Moderate-term on-the-job training
49-9097	Signal and track switch repairers	25	35	10	40	1.92	7.51	Moderate-term on-the-job training
49-9098	Helpers--Installation, maintenance, and repair workers	87	108	21	24	1.63	11.04	Short-term on-the-job training
49-9099	Installation, maintenance, and repair workers, all other	46	61	15	33	0.78	11.14	Moderate-term on-the-job training
51-1011	First-line supervisors/managers of production and operating workers	322	281	-41	-13	1.34	30.15	Work experience in a related field
51-2031	Engine and other machine assemblers	11	12	1	9	0.80	14.00	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-2041	Structural metal fabricators and fitters	82	90	8	10	2.11	18.46	Moderate-term on-the-job training
51-2091	Fiberglass laminators and fabricators	15	14	-1	-7	1.14	12.94	Moderate-term on-the-job training
51-2092	Team assemblers	429	377	-52	-12	1.13	15.20	Moderate-term on-the-job training
51-2099	Assemblers and fabricators, all other	13	12	-1	-8	0.13	14.23	Moderate-term on-the-job training
51-3011	Bakers	36	35	-1	-3	0.67	9.56	Long-term on-the-job training
51-3021	Butchers and meat cutters	30	23	-7	-23	0.64	10.78	Long-term on-the-job training
51-3022	Meat, poultry, and fish cutters and trimmers	39	29	-10	-26	0.68	10.31	Short-term on-the-job training
51-3023	Slaughterers and meat packers	18	11	-7	-39	0.50	7.10	Moderate-term on-the-job training
51-4011	Computer-controlled machine tool operators, metal and plastic	126	139	13	10	2.62	17.07	Moderate-term on-the-job training
51-4021	Extruding and drawing machine setters, operators, and tenders, metal and plastic	18	15	-3	-17	0.59	20.53	Moderate-term on-the-job training
51-4022	Forging machine setters, operators, and tenders, metal and plastic	20	16	-4	-20	2.09	21.72	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-4023	Rolling machine setters, operators, and tenders, metal and plastic	59	51	-8	-14	4.80	24.99	Moderate-term on-the-job training
51-4031	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	100	82	-18	-18	1.26	19.66	Moderate-term on-the-job training
51-4032	Drilling and boring machine tool setters, operators, and tenders, metal and plastic	13	11	-2	-15	1.12	17.30	Moderate-term on-the-job training
51-4033	Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	12	11	-1	-8	0.38	23.07	Moderate-term on-the-job training
51-4034	Lathe and turning machine tool setters, operators, and tenders, metal and plastic	15	13	-2	-13	0.76	21.27	Moderate-term on-the-job training
51-4035	Milling and planing machine setters, operators, and tenders, metal and plastic	41	35	-6	-15	4.29	17.93	Moderate-term on-the-job training
51-4041	Machinists	185	206	21	11	1.30	16.48	Long-term on-the-job training
51-4051	Metal-refining furnace operators and tenders	107	66	-41	-38	15.23	24.37	Moderate-term on-the-job training
51-4052	Pourers and casters, metal	107	62	-45	-42	18.86	24.08	Moderate-term on-the-job training
51-4072	Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic	37	26	-11	-30	0.76	16.45	Moderate-term on-the-job training
51-4081	Multiple machine tool setters, operators, and tenders, metal and plastic	13	10	-3	-23	0.42	18.26	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-4111	Tool and die makers	20	18	-2	-10	0.70	18.92	Long-term on-the-job training
51-4121	Welders, cutters, solderers, and brazers	214	254	40	19	1.49	16.64	Long-term on-the-job training
51-4122	Welding, soldering, and brazing machine setters, operators, and tenders	37	47	10	27	1.40	11.70	Moderate-term on-the-job training
51-4191	Heat treating equipment setters, operators, and tenders, metal and plastic	44	38	-6	-14	5.22	24.33	Moderate-term on-the-job training
51-4193	Plating and coating machine setters, operators, and tenders, metal and plastic	16	13	-3	-19	1.10	16.44	Moderate-term on-the-job training
51-5023	Printing machine operators	17	21	4	24	0.24	15.16	Moderate-term on-the-job training
51-6011	Laundry and dry-cleaning workers	80	102	22	28	0.82	6.55	Moderate-term on-the-job training
51-6021	Pressers, textile, garment, and related materials	17	12	-5	-29	0.68	6.98	Short-term on-the-job training
51-6031	Sewing machine operators	70	57	-13	-19	0.96	13.32	Moderate-term on-the-job training
51-6041	Shoe and leather workers and repairers	14	18	4	29	1.29	7.02	Long-term on-the-job training
51-6051	Sewers, hand	47	59	12	26	1.86	7.19	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-6052	Tailors, dressmakers, and custom sewers	46	58	12	26	1.33	6.95	Long-term on-the-job training
51-6061	Textile bleaching and dyeing machine operators and tenders	69	42	-27	-39	11.54	14.03	Moderate-term on-the-job training
51-6063	Textile knitting and weaving machine setters, operators, and tenders	126	58	-68	-54	11.72	17.89	Long-term on-the-job training
51-6091	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers	65	27	-38	-58	11.34	18.58	Moderate-term on-the-job training
51-6093	Upholsterers	43	55	12	28	1.31	7.61	Long-term on-the-job training
51-7011	Cabinetmakers and bench carpenters	10	11	1	10	0.23	16.14	Long-term on-the-job training
51-7021	Furniture finishers	19	24	5	26	1.23	8.28	Long-term on-the-job training
51-7041	Sawing machine setters, operators, and tenders, wood	18	18	0	0	0.93	15.14	Moderate-term on-the-job training
51-7042	Woodworking machine setters, operators, and tenders, except sawing	17	18	1	6	0.58	14.54	Moderate-term on-the-job training
51-8011	Nuclear power reactor operators	19	24	5	26	6.25	43.88	Long-term on-the-job training
51-8013	Power plant operators	60	71	11	18	4.26	30.66	Long-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-8031	Water and liquid waste treatment plant and system operators	57	70	13	23	1.38	16.23	Long-term on-the-job training
51-8091	Chemical plant and system operators	112	50	-62	-55	6.80	24.01	Long-term on-the-job training
51-8092	Gas plant operators	18	15	-3	-17	2.96	28.06	Long-term on-the-job training
51-9011	Chemical equipment operators and tenders	44	20	-24	-55	2.30	20.01	Moderate-term on-the-job training
51-9012	Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	26	17	-9	-35	1.65	15.88	Moderate-term on-the-job training
51-9021	Crushing, grinding, and polishing machine setters, operators, and tenders	18	16	-2	-11	1.19	12.79	Moderate-term on-the-job training
51-9023	Mixing and blending machine setters, operators, and tenders	36	17	-19	-53	0.73	17.45	Moderate-term on-the-job training
51-9032	Cutting and slicing machine setters, operators, and tenders	25	18	-7	-28	0.95	14.74	Moderate-term on-the-job training
51-9041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	93	52	-41	-44	3.31	16.18	Moderate-term on-the-job training
51-9051	Furnace, kiln, oven, drier, and kettle operators and tenders	23	15	-8	-35	2.75	21.19	Moderate-term on-the-job training
51-9061	Inspectors, testers, sorters, samplers, and weighers	256	215	-41	-16	1.56	18.73	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-9071	Jewelers and precious stone and metal workers	16	21	5	31	0.81	12.39	Postsecondary vocational award
51-9081	Dental laboratory technicians	45	27	-18	-40	2.69	12.20	Long-term on-the-job training
51-9111	Packaging and filling machine operators and tenders	73	52	-21	-29	0.60	19.33	Short-term on-the-job training
51-9121	Coating, painting, and spraying machine setters, operators, and tenders	46	45	-1	-2	1.28	15.52	Moderate-term on-the-job training
51-9122	Painters, transportation equipment	15	17	2	13	0.76	12.76	Long-term on-the-job training
51-9123	Painting, coating, and decorating workers	13	12	-1	-8	1.02	11.26	Short-term on-the-job training
51-9132	Photographic processing machine operators	22	18	-4	-18	1.10	7.64	Short-term on-the-job training
51-9141	Semiconductor processors	12	22	10	83	0.86	21.90	Associate's degree
51-9195	Molders, shapers, and casters, except metal and plastic	13	11	-2	-15	0.78	11.07	Moderate-term on-the-job training
51-9196	Paper goods machine setters, operators, and tenders	20	24	4	20	0.56	13.17	Moderate-term on-the-job training
51-9197	Tire builders	121	56	-65	-54	15.69	19.23	Moderate-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
51-9198	Helpers--Production workers	216	185	-31	-14	1.30	14.34	Short-term on-the-job training
51-9199	Production workers, all other	36	32	-4	-11	0.40	16.07	Moderate- term on-the- job training
53-1021	First-line supervisors/managers of helpers, laborers, and material movers, hand	75	89	14	19	1.09	20.54	Work experience in a related field
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	85	104	19	22	1.06	24.87	Work experience in a related field
53-2012	Commercial pilots	13	16	3	23	0.94	23.57	Postsecondary vocational award
53-3021	Bus drivers, transit and intercity	56	56	0	0	0.76	7.18	Moderate- term on-the- job training
53-3022	Bus drivers, school	142	165	23	16	0.81	9.96	Short-term on-the-job training
53-3031	Driver/sales workers	289	337	48	17	1.34	12.25	Short-term on-the-job training
53-3032	Truck drivers, heavy and tractor-trailer	807	1,078	271	34	1.20	15.33	Moderate- term on-the- job training
53-3033	Truck drivers, light or delivery services	555	678	123	22	1.36	11.67	Short-term on-the-job training
53-3041	Taxi drivers and chauffeurs	78	94	16	21	0.65	7.01	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
53-4019	Locomotive engineers and operators	29	36	7	24	1.68	19.44	Moderate-term on-the-job training
53-4031	Railroad conductors and yardmasters	24	32	8	33	2.18	20.42	Moderate-term on-the-job training
53-5021	Captains, mates, and pilots of water vessels	22	25	3	14	1.70	25.14	Work experience in a related field
53-5022	Motorboat operators	26	29	3	12	7.22	24.42	Moderate-term on-the-job training
53-6021	Parking lot attendants	19	21	2	11	0.37	6.97	Short-term on-the-job training
53-6031	Service station attendants	17	22	5	29	0.57	14.79	Short-term on-the-job training
53-7021	Crane and tower operators	94	91	-3	-3	5.93	28.05	Long-term on-the-job training
53-7032	Excavating and loading machine and dragline operators	59	77	18	31	2.36	14.55	Moderate-term on-the-job training
53-7051	Industrial truck and tractor operators	331	350	19	6	1.52	16.05	Short-term on-the-job training
53-7061	Cleaners of vehicles and equipment	108	130	22	20	0.85	9.01	Short-term on-the-job training
53-7062	Laborers and freight, stock, and material movers, hand	826	910	84	10	0.99	11.04	Short-term on-the-job training

SOC Code	Description	2009 Jobs	2016 Jobs	Change	% Change	Location Quotient	2009 Median Hourly Earnings (\$)	Typical Education & Experience Level
53-7063	Machine feeders and offbearers	53	41	-12	-23	1.17	16.10	Short-term on-the-job training
53-7064	Packers and packagers, hand	242	197	-45	-19	0.89	10.21	Short-term on-the-job training
53-7081	Refuse and recyclable material collectors	32	36	4	13	0.58	14.13	Short-term on-the-job training
53-7199	Material moving workers, all other	56	60	4	7	4.07	25.27	Moderate- term on-the- job training
		63,974	77,578	13,603	21%	\$15.37		

at least
1.25 greater than \$15.37

Source: EMSI

Appendix B: Businesses by 3-Digit NAICS Codes

Berkeley County								
Industry	NAICS Code	Change						
		2003	2008	Average Size	#	%	SC % change	US % change
Forestry and Logging	113	11	8	5	-3	-27.3	-21.9	-14.7
Construction of Buildings	236	91	91	6	0	0.0	6.4	12.3
Heavy and Civil Engineering Construction	237	27	38	17	11	40.7	4.2	-0.5
Specialty Trade Contractors	238	274	283	8	9	3.3	-3.0	11.1
Food Manufacturing	311	3	5	4	2	66.7	-6.0	-2.1
Printing and Related Support Activities	323	4	1	0	-3	-75.0	-9.1	-11.7
Chemical Manufacturing	325	8	10	95	2	25.0	14.8	5.1
Nonmetallic Mineral Product Manufacturing	327	6	7	36	1	16.7	14.1	4.1
Primary Metal Manufacturing	331	8	10	211	2	25.0	18.1	-3.1
Fabricated Metal Product Manufacturing	332	11	12	21	1	9.1	0.6	-0.9
Miscellaneous Manufacturing	339	11	13	52	2	18.2	18.4	-0.4
Merchant Wholesalers, Durable Goods	423	48	68	12	20	41.7	-5.9	-3.6
Merchant Wholesalers, Nondurable Goods	424	20	14	20	-6	-30.0	-11.3	-3.4
Motor Vehicle and Parts Dealers	441	58	54	15	-4	-6.9	-7.7	1.6
Furniture and Home Furnishings Stores	442	18	16	6	-2	-11.1	-8.7	0.1
Electronics and Appliance Stores	443	14	7	4	-7	-50.0	-15.0	-1.0
Building Material and Garden Equipment and Supplies Dealers	444	26	26	17	0	0.0	-5.4	1.2
Food and Beverage Stores	445	38	39	23	1	2.6	-9.7	-0.1
Health and Personal Care Stores	446	20	35	9	15	75.0	16.3	19.9
Gasoline Stations	447	49	57	8	8	16.3	-0.3	-2.2
Clothing and Clothing Accessories Stores	448	19	21	7	2	10.5	-1.9	5.8
General Merchandise Stores	452	14	19	27	5	35.7	18.1	13.0
Nonstore Retailers	454	9	5	5	-4	-44.4	-16.2	13.9
Warehousing and Storage	493	15	13	46	-2	-13.3	3.1	18.7
Credit Intermediation and Related Activities	522	60	73	8	13	21.7	6.5	16.6
Real Estate	531	57	84	4	27	47.4	22.1	18.2
Nursing and Residential Care Facilities	623	12	10	68	-2	-16.7	0.0	9.4
Social Assistance	624	33	48	11	15	45.5	1.0	34.3
Accommodation	721	17	24	15	7	41.2	0.1	4.9
Repair and Maintenance	811	64	60	14	-4	-6.3	-13.2	-0.9
Religious, Grantmaking, Civic, Professional, and Similar Organizations	813	15	22	7	7	46.7	18.3	4.1
Private Households	814	23	56	1	33	143.5	21.2	22.1
growth rate exceeds both SC and US growth rates								

Source: Bureau of Labor Statistics

Appendix C: Berkeley County Employment by Industry Sector

Industry	NAICS code	Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
		2003	2008	#	%				
Total		34,103	40,234	6,131	18.0			41,340	20%

6 star sectors									
Industry	NAICS code	Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
		2003	2008	#	%				
Machinery Manufacturing	333	63	808	745	1,183	2.33	743	57,668	AA

5 star sectors									
Industry	NAICS code	Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
		2003	2008	#	%				
Miscellaneous Manufacturing	339	538	676	138	26	3.46	167	46,904	D
Merchant Wholesalers, Durable Goods	423	402	821	419	104	0.90	400	45,812	A
Building Material and Garden Equipment and Supplies Dealers	444	337	454	117	35	1.43	101	27,664	A
Rental and Leasing Services	532	121	237	116	96	1.33	121	39,208	A
Professional, Scientific, and Technical Services	541	610	4,043	3,433	563	1.01	3,325	62,244	AA
Educational Services	611	63	272	209	332	0.42	198	63,024	AA
Amusement, Gambling, and Recreation Industries	713	386	559	173	45	1.36	138	20,384	AA
Repair and Maintenance	811	284	811	527	186	2.08	528	41,028	AA

4 star sectors		Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
Industry	NAICS code	2003	2008	#	%				
Heavy and Civil Engineering Construction	237	405	663	258	64	2.58	226	39,780	D
Primary Metal Manufacturing	331	1,886	2,111	225	12	16.16	347	73,268	D
Health and Personal Care Stores	446	162	324	162	100	1.13	150	28,028	A
Truck Transportation	484	248	489	241	97	1.04	228	35,620	AA
Credit Intermediation and Related Activities	522	331	590	259	78	0.76	266	36,036	AA
Real Estate	531	180	332	152	84	0.80	140	34,164	AA
Ambulatory Health Care Services	621	418	686	268	64	0.42	193	37,700	AA
Accommodation	721	252	370	118	47	0.71	105	15,028	A

3 star or fewer sectors		Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
Industry	NAICS code	2003	2008	#	%				
Construction of Buildings	236	529	579	50	9	1.18	24	52,364	A
Gasoline Stations	447	409	464	55	13	1.88	72	16,432	A
General Merchandise Stores	452	291	517	226	78	0.63	202	18,720	BA
Miscellaneous Store Retailers	453	67	82	15	22	0.35	22	20,904	A
Personal and Laundry Services	812	219	326	107	49	0.86	97	18,460	D
Religious, Grantmaking, Civic, Professional, and Similar Organizations	813	115	153	38	33	--	32	23,296	AA
Private Households	814	54	76	22	41	--	11	14,508	AA
Forestry and Logging	113	47	43	-4	-9	2.80	3	41,340	D
Wood Product Manufacturing	321	265	191	-74	-28	1.56	-35	45,916	D
Chemical Manufacturing	325	1,458	952	-506	-35	3.27	-413	76,180	D
Nonmetallic Mineral Product Manufacturing	327	334	250	-84	-25	2.07	-62	48,204	D
Fabricated Metal Product Manufacturing	332	565	249	-316	-56	0.60	-338	42,536	A
Furniture and Home Furnishings Stores	442	67	90	23	34	0.70	26	24,856	D

3 star or fewer sectors		Employment		2003-2008 Change		Location Quotient	Competitive Effect	2008 Average Annual Wage (\$)	Projected Growth
Industry	NAICS code	2003	2008	#	%				
Clothing and Clothing Accessories Stores	448	76	137	61	80	0.32	52	12,688	BA
Sporting Goods, Hobby, Book, and Music Stores	451	69	94	25	36	0.50	26	17,316	BA
Support Activities for Transportation	488	643	316	-327	-51	1.98	-421	40,664	A
Publishing Industries (except Internet)	511	107	24	-83	-78	0.14	-77	65,468	A
Food Services and Drinking Places	722	2,076	2,348	272	13	0.88	35	11,440	BA
Specialty Trade Contractors	238	2,416	2,173	-243	-10	1.79	-419	38,220	BA
Food Manufacturing	311	29	21	-8	-28	0.05	-7	16,692	A
Transportation Equipment Manufacturing	336	1,050	253	-797	-76	0.65	-710	57,668	D
Merchant Wholesalers, Nondurable Goods	424	713	282	-431	-60	1.11	-446	59,644	D
Motor Vehicle and Parts Dealers	441	884	819	-65	-7	1.69	-41	34,372	BA
Food and Beverage Stores	445	1,937	893	-1,044	-54	2.72	-1,060	18,824	D
Nonstore Retailers	454	76	26	-50	-66	0.33	-52	30,056	A
Warehousing and Storage	493	684	602	-82	-12	3.92	-280	26,884	BA
Nursing and Residential Care Facilities	623	726	677	-49	-7	0.77	-111	20,384	AA
Social Assistance	624	612	506	-106	-17	--	-230	17,056	AA
Furniture and Related Product Manufacturing	337	26	18	-8	-31	0.17	-4	25,740	D
Electronics and Appliance Stores	443	63	30	-33	-52	0.19	-37	24,336	D

Methodology and Sourcing

Projected Growth Grading Scale:

AA=above average

A=average

BA=below average

D=decline

Sectors are rated on 6 factors: 2003-2008 employment growth, 2003-2008 employment growth rate, location quotient, competitive effect, average annual wage, and projected growth.

Stars are based on: 2003-2008 employment growth of 75 or more, 2003-2008 employment growth rate greater than 18% (overall county job growth rate), location quotient of at least 1.25, competitive effect greater than 0, average annual wage greater than \$41,340 (2008 average for all jobs in the county), and average or above average projected growth.

Location Quotient: percentage of employment in the sector in the county divided by the percentage of employment in that sector in the US; gives an indication of how concentrated employment in the sector is in the county; based on 2008 data.

Competitive Effect: based on shift-share analysis; represents the change in employment in the sector in the county after accounting for overall US employment growth and growth/decline in the sector in the US.

Source: Bureau of Labor Statistics; projections based on data from EMSI and SC Department of Commerce.



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